



Norman H. Bangerter
Governor
Kenneth L. Alkema
Executive Director
Don A. Ostler, P.E.
Director

State of Utah
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER QUALITY

288 North 1460 West
Salt Lake City, Utah
(801) 538-6146
(801) 538-6016 Fax

Reply to: State of Utah
Division of Water Quality
Department of Environmental Quality
Salt Lake City, Utah 84114-4870

March 12, 1992

Certified Mail
(return receipt requested)

RECEIVED
MAR 18 1992

Mr. Frank Wicks
Vice President and General Manager
Barrick Mercur Gold Mine
P.O. Box 838
Tooele, Utah 84704

DIVISION OF
OIL GAS & MINING

RE: Final Stipulation and Consent Order,
Dump Leach No. 2, Docket No. GW 90-
03-A.

Dear Mr. Wicks:

The public comment for the draft Stipulation and Consent Order has closed as of March 5, 1992. No comments were received from the public regarding this action. As a result, we have signed the Order, making it final and immediately effective.

We have also reviewed the deadlines imposed in the order and have determined that some are need of revision. Consequently, the following deadlines are revised in the final Order:

1. Submittal of Neutralization Workplan and Compliance Schedule, Order Condition No. 3 - the deadline of March 1, 1992 has been reset to April 1, 1992.
2. Submittal of Closure Workplan and Compliance Schedule, Order Condition No. 4 - the previous deadline of April 1, 1992 has been reset to May 1, 1992.

All other deadlines remain as originally stipulated.

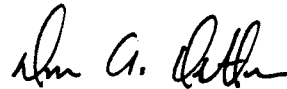
Pursuant to Order Condition No. 2 and because we did not receive a ground water discharge permit application by January 31, 1992, we understand that Barrick will stop actively leaching Dump Leach No. 2 on or before July 31, 1992. Active leaching is interpreted to include the application of cyanide charged lixiviant (barren solution) on the dump, but does not include the application of potable freshwater or neutralization agents.

Mr. Frank Wicks
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If you have any questions or comments on the final Stipulation and Consent Order, please call Loren Morton at 538-6146. We appreciate your continued cooperation.

Sincerely,

Utah Water Quality Board



Don A. Ostler, P.E.
Executive Secretary

Enclosure

DAO:lbm:lm

cc: Ken Alkema, DEQ
Fred Nelson, Attorney General's Office
Ken Bousfield, DDW/S
Myron Bateman, Tooele County Health Dept.
Glade Shelly, Utah County Health Dept.
Wayne Hedberg, DOGM
David Bird, Parsons, Behle, & Latimer
J.B. Brown, Dames & Moore

Q:BMD2SCO.LTR
FILE:GW-BARRICK DUMP No. 2

BEFORE THE UTAH WATER QUALITY BOARD

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In the Matter of: :

Barrick Mercur Gold Mine : STIPULATION AND CONSENT ORDER

Docket Number GW 90-03-A :

--00000--

This STIPULATION AND CONSENT ORDER is issued by the Utah Water Quality Board (the "Board") representing the State of Utah (the "State") pursuant to the Utah Water Quality Act (the "Act"); Section 19-5-101 et seq., Utah Code Annotated, 1953 as amended.

STIPULATION

1. The parties agree that the Board has jurisdiction over this matter.
2. Barrick Mercur Gold Mine (Barrick) operates a gold leaching facility in T.6S., R.3W., Sec. 5, SE¼, SE¼, Tooele County, Utah; herein referred to as Dump Leach No. 2.
3. Barrick was issued a Construction Permit for Dump Leach No. 2 on September 19, 1985 for construction of a facility designed to incorporate control technology to prevent the discharge of pollutants to waters of the state. The permitted liner system design included a primary flexible membrane liner, a leak detection system, and secondary clay liner, in descending order.
4. Full scale operation of Dump Leach No. 2 began on July 2, 1986. On July 14, 1986 Barrick notified the Executive Secretary of the presence of fluid in the leak detection system of Dump Leach No. 2. Subsequent chemical analysis of this fluid indicated failure of the flexible membrane liner.
5. The pregnant liquor contained within Dump Leach No. 2 has the potential to adversely impact public health and the environment, based on analyses submitted by Barrick on August 28, 1989. These analyses showed concentrations of pH, fluoride, Nitrate (as N), cadmium, copper, lead, silver and zinc in excess of the Ground Water Quality Standards; and concentrations of total cyanide and nickel in excess of EPA Drinking Water Health Advisories.
6. In a September, 1989 cyanide attenuation study of the clay secondary liner, Barrick demonstrated that a barren cyanide solution, after passing through samples of the clay secondary liner exceeded the EPA Drinking Water Health Advisory for total cyanide.

7. Dump Leach No. 2 is found in the recharge area for the drinking water supply aquifer in Cedar Valley, Utah County. The closest drinking water source is approximately five miles downgradient from the Dump Leach No. 2 facility.
8. Total cyanide was detected in ground water quality samples collected from well MW-9 at Dump Leach No. 2, a well completed in the uppermost bedrock aquifer. One sample collected on March 7, 1990 was reported by Barrick to contain a total cyanide concentration in excess of the EPA Drinking Water Health Advisory.
9. Based on the above facts, the Executive Secretary determined that pregnant liquor leachates released from the clay secondary liner constitute a discharge of wastewater from Dump Leach No. 2 to ground water.
10. Wastewater discharge by Barrick is subject to the requirements of the Act, and sections R448-1 and 6 of the Utah Administrative Code (the "Code"). Barrick is also subject to all applicable provisions of the Code.
11. Notice of Violation and Order, Docket No. GW90-03, was issued to Barrick by the Executive Secretary on December 3, 1990 based on the above mentioned facts.
12. Barrick responded in a timely manner to the Notice of Violation and Order on January 2, 1991 and requested a hearing before the Board pursuant to 26-11-12 Utah Code Annotated 1953, as amended (UCA).
13. As stated in their January 2, 1991 response, Barrick maintains that the available ground water quality data do not indicate there has been a release of process solution (pregnant liquor) to ground water.
14. In their January 2, 1991 response Barrick also provided information which cited the total cyanide content of the March 7, 1990 ground water quality sample from well MW-9 as a laboratory error.
15. The parties now desire to resolve this matter fully without further admissions and without further administrative or judicial proceedings except to the extent provided below by entering into this CONSENT ORDER. By so doing, Barrick withdraws its request for a hearing before the Board.
16. Notice of Violation and Order, Docket No. GW 90-03, shall be resolved by completion of terms of this CONSENT ORDER.
17. For the purpose of this CONSENT ORDER the parties agree and stipulate to the above stated facts. None of the stipulations related herein shall be considered admissions by any person related or unrelated to this CONSENT ORDER for purposes other than determining the basis of this CONSENT ORDER.

ORDER

1. Barrick will continue ground water quality monitoring of existing monitoring well MW-9 at Dump Leach No. 2 on a monthly basis until the Executive Secretary can determine background ground water quality conditions. Thereafter, this well will be monitored for ground water quality on a quarterly basis similarly to existing wells MW-5 and MW-7 until further notice by the Executive Secretary. Ground water sampling will include all the chemical parameters, methods, and procedures required for Dump Leach No. 3 in Ground Water Quality Discharge Permit No. UGW450001. Barrick shall submit the results of monthly monitoring to the Executive Secretary in writing by the 15th day of the following month. Barrick shall submit the results of quarterly monitoring to the Executive Secretary in writing according to the following schedule:

<u>Quarter</u>	<u>Report Due on</u>
1st (Jan., Feb., Mar.)	April 15
2nd (April, May, June)	July 15
3rd (July, Aug., Sept.)	October 15
4th (Oct., Nov., Dec.)	January 15

2. Barrick shall not operate nor actively leach Dump Leach No. 2 beyond July 31, 1992 without authorization of a valid ground water discharge permit. If Barrick elects to apply for a ground water discharge permit, said permit application should be submitted to the Executive Secretary no later than January 31, 1992.
3. Barrick shall submit on or before March 1, 1992, a detailed work plan and compliance schedule for neutralization of Dump Leach No. 2 for Executive Secretary approval. The work plan will include detailed information on how Dump Leach No. 2 will be neutralized, leachate/rinsate quality parameters to be monitored, concentration limits for neutralization, and quarterly reporting of leachate/rinsate monitoring. The compliance schedule will include: commencement of neutralization on or before August 3, 1992, specific intermediate steps, milestones and time frames for completion of neutralization, dates for submittal of quarterly monitoring reports, and the final date by which neutralization shall be complete.

The Executive Secretary shall review the Neutralization Work Plan and Compliance Schedule, or revisions thereto, and notify Barrick of approval or disapproval. In the event of disapproval the Executive Secretary shall specify the deficiencies in writing. Within 30 days of receipt of written deficiencies Barrick shall submit a revised Work Plan and Compliance Schedule that corrects all specified deficiencies. Upon Executive Secretary approval of the Work Plan and Compliance Schedule, Barrick shall execute and complete neutralization of Dump Leach No. 2 in compliance with the approved time frames and schedule.

4. Barrick shall submit on or before April 1, 1992 a detailed work plan and compliance schedule for closure of Dump Leach No. 2 for Executive Secretary approval. The work plan will include final construction-ready engineering plans and specifications and detailed description of all construction procedures, methods and materials for closure of Dump Leach No. 2. Closure design shall comply with the criteria provided Barrick for Dump Leach No. 3 in a letter dated May 7, 1990. Barrick shall submit an As-Built report to document the closure as per the approved plans and design. The compliance schedule will include the date closure construction will begin, which shall represent the earliest date possible; all intermediate steps, milestones, and time frames; the final date by which closure will be completed, and the date by which the As-Built Report will be submitted.

The Executive Secretary shall review the Closure Work Plan and Compliance Schedule, or revisions thereto, and notify Barrick of approval or disapproval. In the event of disapproval the Executive Secretary shall specify the deficiencies in writing. Within 30 days of receipt of written deficiencies Barrick shall submit a revised Work Plan and Compliance Schedule that corrects all specified deficiencies. Upon Executive Secretary approval of the Work Plan and Compliance Schedule, Barrick shall execute and complete the closure of Dump Leach No. 2 in compliance with the approved time frames and schedule.

5. Barrick shall submit on or before July 1, 1992 a detailed plan and compliance schedule for post-closure monitoring of Dump Leach No. 2 for Executive Secretary approval. This plan shall comply with the criteria provided Barrick for Dump Leach No. 3 in a letter dated May 7, 1990. Ground water monitoring shall be limited to the existing monitoring wells at Dump Leach No. 2. The compliance schedule will include the date post-closure monitoring will begin, all intermediate steps, milestones, and time frames, and the date monitoring will cease.

The Executive Secretary shall review the Post-closure Monitoring Plan and Compliance Schedule, or revisions thereto, and notify Barrick of approval or disapproval. In the event of disapproval the Executive Secretary shall specify the deficiencies in writing. Within 30 days of receipt of written deficiencies Barrick shall submit a revised Work Plan and Compliance Schedule that corrects all specified deficiencies. Upon Executive Secretary approval of the Work Plan and Compliance Schedule, Barrick shall execute and complete the closure of Dump Leach No. 2 in compliance with the approved time frames and schedule.

6. Barrick shall pay stipulated penalties to the Division of Water Quality in the event Barrick fails to meet the deadlines for each work plan, plan, report, deficiency response thereto, cessation of active leaching, neutralization, and closure of Dump Leach No. 2 as follows:

Required Ground Water Monitoring Reports	\$200.00____ per day
Required Leachate Neutralization Reports	\$200.00____ per day

Cessation of Active Leaching of Dump Leach No. 2	\$1000.00__ per day
Neutralization Work Plan and Compliance Schedule	\$500.00__ per day
Closure Work Plan and Compliance Schedule	\$500.00__ per day
Post-closure Monitoring Plan and Compliance Schedule	\$500.00__ per day
Commencement of Neutralization	\$1000.00__ per day
Commencement of Closure	\$1000.00__ per day
Completion of Closure	\$1000.00__ per day

Amounts payable under this provision will be remitted within 30 days of written notice from the Executive Secretary that a deadline has been exceeded.

Barrick may petition the Executive Secretary for extension of any deadline imposed by this order for events beyond Barrick's control, including without limitation acts of God, public enemy, unforeseen strikes or work stoppages, fire, explosion, flood, tornado, earthquake, lightning, riot, sabotage or war. The Executive Secretary shall evaluate the petition and either grant it or deny it, in writing. Barrick may appeal any denied extension to the Water Quality Board within 10 days of receipt of the denial. Any fine levied under this section shall accumulate from the original due date unless the appeal is granted and a revised due date is set by either the Executive Secretary or the Board.

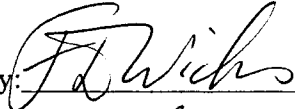
7. Nothing in this CONSENT ORDER shall constitute or be construed as a waiver by the State of its right to initiate enforcement action, including civil penalties, against Barrick in the event of future noncompliance with the Utah Water Pollution Control Act, nor shall the State be precluded in any way from taking appropriate action to abate an imminent endangerment to public health or the environment should such a situation arise at Barrick's facilities. Nothing in this CONSENT ORDER shall constitute or be construed as a release from any claim, to include natural resource damage claims, cause of action, or demand in law or equity which the State or Barrick may have against each other or any person, firm, partnership, or corporation for any liability arising out of or relating in any way to the release of pollutants to waters of the State.
8. This CONSENT ORDER expressly contemplates submission of certain plans, proposals and reports by Barrick to the Executive Secretary for his review and approval. Where opportunity for review and approval is provided, Barrick shall not proceed with the proposed activity unless and until approvals have been received. If agreement by Barrick and the Executive Secretary cannot be reached regarding any plan, proposal or report under this CONSENT ORDER, Barrick or the Executive Secretary may commence a declaratory order proceeding under the Utah Administrative Procedures Act and applicable regulations of the Board to resolve the disputed plan, proposal or report. The Board's decision in any adjudicative proceeding shall constitute final agency action and be subject to judicial review under applicable state law.
9. Barrick's failure to meet or satisfy any requirements set out in this CONSENT ORDER shall be excused for a reasonable time to the extent the failure is caused by events beyond

Barrick's control, including without limitation acts of God, public enemy, unforeseen strikes or work stoppages, fire, explosion, flood, tornado, earthquake, lightning, riot, sabotage or war.

This CONSENT ORDER shall become effective upon execution by Barrick and the Executive Secretary of Utah Water Quality Board.

DATED this 13th day of March, 1992

Barrick Mercur Gold Mine

By: 

Title V.P. Gen Mgr

Utah Water Quality Board

By: 

Don A. Ostler, P.E.
Executive Secretary

BMD2RF3.SCO